MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2017/2018 SESSION

TSO 7021 – Service Oriented Architecture Using Web Services
(All sections / Groups)

2 OCTOBER 2017
8.00 p.m - 10.00 p.m
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of 4 pages only.

2. Attempt **ALL** the questions. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please write your answers in the Answer Booklet provided.

Question 1

a) Lazada is an ecommerce company that sells various range of items from many suppliers. Explain and draw the architecture on how Lazada can transform its functionality into services based on Service Oriented Architecture so that the system can be integrated into various platforms hosted by other suppliers. [4 marks]

b) Is it possible for a two different namespace to share the same URI value? What does the URL contains? [2 marks]

c) What is the problem with the following elements?

```
<weather>

        <city>Melbourne<city>

        <temperature>18celcius</temperature>

</weather>
```
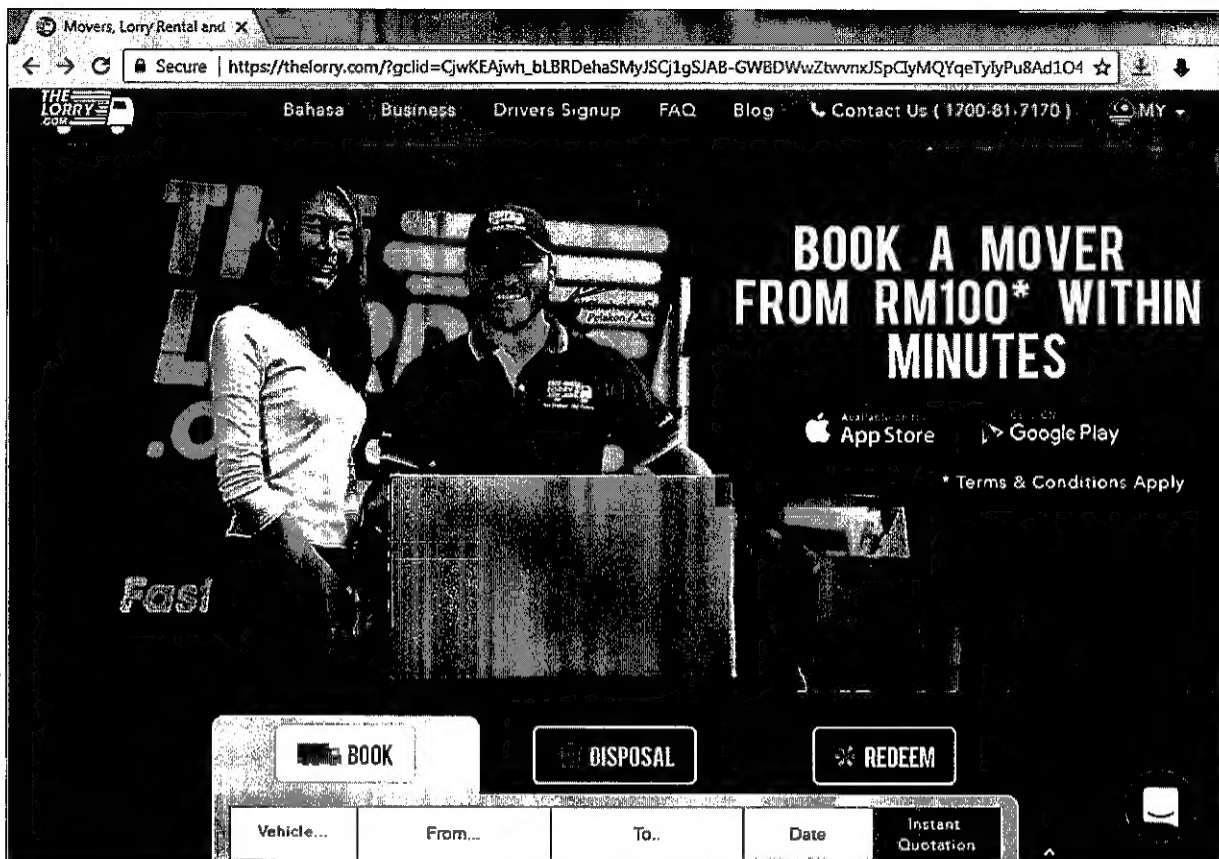
Rewrite the XML code in order to fix the problem. [2 marks]

d) How does Web Services and Distributed Systems similar and differ? [2 marks]

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Question 2

a) Write the DTD for the above website. [4 marks]

b) Write the XML Schema that is equivalent to the DTD in question 2(a). [4 marks]

c) Write one (1) XML document that conforms to the DTD in question 2(a). [2 marks]

Continued......

Question 3

a) What is a SOAP Fault? How does each fault is determined? [3 marks]

b) Consider the following C# code.

```
[WebMethod]
public Ecommerce retrieveItem(string itemId, string userId)
{
   // implementation omitted
}

public class Ecommerce {
      public string itemName;
      private float costPrice;
      public float retailPrice;
      public string getItemName()
      {
            return itemName;
      }
}
```
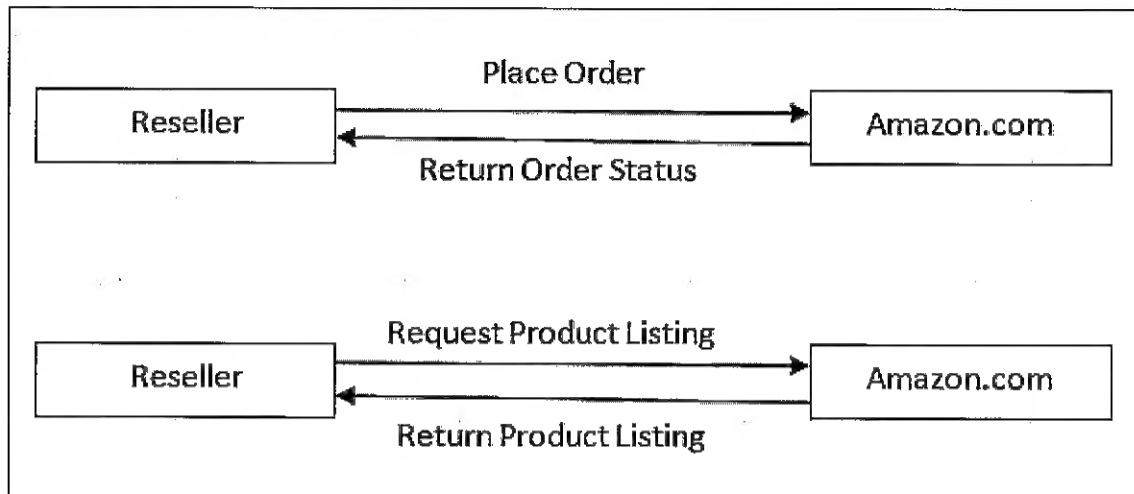Write the SOAP request and response for the above web method. [6 marks]

c) What kind of information is stored in a UDDI yellow page? [1 mark]

Continued……

Question 4

a) Consider the following scenario.

Write the <types> element of the WSDL that describes all the functions for the above scenario. [4 marks]

b) Refer to the scenario in Question 4. Write the <message> elements that describe the messages being used for the communication.[4 marks]

c) How does the quality of a Web Service being measured? [2 marks]

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